

1 What is claimed is:

- 2
- 3 1. An isolated nucleic acid molecule selected from the group consisting of:
- 4 a) a nucleic acid molecule comprising a nucleotide sequence which is at least
- 5 99% identical to the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3;
- 6 b) a nucleic acid molecule comprising a fragment of at least 300 nucleotides of
- 7 the nucleotide sequence of SEQ ID NO: 1, SEQ ID NO:3;
- 8 c) a nucleic acid molecule which encodes a polypeptide comprising the amino
- 9 acid sequence of SEQ ID NO:2;
- 10 d) a nucleic acid molecule which encodes a fragment of a polypeptide
- 11 comprising the amino acid sequence of SEQ ID NO:2, wherein the fragment comprises at
- 12 least 15 contiguous amino acids of SEQ ID NO: 2; and
- 13 e) a nucleic acid molecule which encodes a naturally occurring allelic variant of
- 14 a polypeptide comprising the amino acid sequence of SEQ ID NO:2, wherein the nucleic
- 15 acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO: 1, 3, or a
- 16 complement thereof, under stringent conditions.
- 17
- 18 2. The isolated nucleic acid molecule of claim 1, which is selected from the
- 19 group consisting of:
- 20 a) a nucleic acid comprising the nucleotide sequence of SEQ ID NO: 1, SEQ ID
- 21 NO:3; and
- 22 b) a nucleic acid molecule which encodes a polypeptide comprising the amino
- 23 acid sequence of SEQ ID NO:2.
- 24
- 25 3. The nucleic acid molecule of claim 1 further comprising vector nucleic acid
- 26 sequences.
- 27
- 28 4. The nucleic acid molecule of claim 1 further comprising nucleic acid
- 29 sequences encoding a heterologous polypeptide.
- 30
- 31 5. A host cell which contains the nucleic acid molecule of claim 1.
- 32
- 33 6. The host cell of claim 5 which is a mammalian host cell.

- 1
- 2 7. A non-human mammalian host cell containing the nucleic acid molecule of
- 3 claim 1.
- 4
- 5 8. An isolated polypeptide selected from the group consisting of:
- 6 a) a polypeptide which is encoded by a nucleic acid molecule comprising a
- 7 nucleotide sequence which is at least 99% identical to a nucleic acid comprising the
- 8 nucleotide sequence of SEQ ID NO: 1, SEQ ID NO:3, or a complement thereof.
- 9 b) a naturally occurring allelic variant of a polypeptide comprising the amino
- 10 acid sequence of SEQ ID NO:2, wherein the polypeptide is encoded by a nucleic acid
- 11 molecule which hybridizes to a nucleic acid molecule comprising SEQ ID NO: 1, SEQ ID
- 12 NO:3, or a complement thereof under stringent conditions; and
- 13 c) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID
- 14 NO:2, wherein the fragment comprises at least 15 contiguous amino acids of SEQ ID NO:2.
- 15
- 16 9. The isolated polypeptide of claim 8 comprising the amino acid sequence of
- 17 SEQ ID NO:2.
- 18
- 19 10. The polypeptide of claim 8 further comprising heterologous amino acid
- 20 sequences.
- 21
- 22 11. An antibody which specifically or selectively binds to a polypeptide of claim
- 23 8.
- 24
- 25 12. A method for producing a polypeptide selected from the group consisting of:
- 26 a) a polypeptide comprising the amino acid sequence of SEQ ID NO:2;
- 27 b) a polypeptide comprising a fragment of the amino acid sequence of SEQ ID
- 28 NO:2, wherein the fragment comprises at least 15 contiguous amino acids of SEQ ID NO:2;
- 29 and
- 30 c) a naturally occurring allelic variant of a polypeptide comprising the amino
- 31 acid sequence of SEQ ID NO:2, wherein the polypeptide is encoded by a nucleic acid
- 32 molecule which hybridizes to a nucleic acid molecule comprising SEQ ID NO:1, SEQ ID
- 33 NO:3, or a complement thereof under stringent conditions;

comprising culturing the host cell of claim 5 under conditions in which the nucleic acid molecule is expressed.

13. A method for detecting the presence of a polypeptide of claim 8 in a sample, comprising:

- a) contacting the sample with a compound which selectively binds to a polypeptide of claim 8; and
- b) determining whether the compound binds to the polypeptide in the sample.

14. The method of claim 13, wherein the compound which binds to the polypeptide is an antibody.

15. A kit comprising a compound which selectively binds to a polypeptide of claim 8 and instructions for use.

16. A method for detecting the presence of a nucleic acid molecule of claim 1 in a sample, comprising the steps of:

- a) contacting the sample with a nucleic acid probe or primer which selectively hybridizes to the nucleic acid molecule; and
- b) determining whether the nucleic acid probe or primer binds to a nucleic acid molecule in the sample.

17. The method of claim 16, wherein the sample comprises mRNA molecules and is contacted with a nucleic acid probe.

18. A kit comprising a compound which selectively hybridizes to a nucleic acid molecule of claim 1 and instructions for use.

19. A method for identifying a compound which binds to a polypeptide of claim 8 comprising the steps of:

- a) contacting a polypeptide, or a cell expressing a polypeptide of claim 8 with a test compound; and
- b) determining whether the polypeptide binds to the test compound.

1  
2           20.    The method of claim 19, wherein the binding of the test compound to the  
3 polypeptide is detected by a method selected from the group consisting of:  
4           a)    detection of binding by direct detecting of test compound/polypeptide  
5 binding;  
6           b)    detection of binding using a competition binding assay;  
7           c)    detection of binding using an assay for 33449-mediated signal transduction.

8  
9           21.    A method for modulating the activity of a polypeptide of claim 8 comprising  
10 contacting a polypeptide or a cell expressing a polypeptide of claim 8 with a compound  
11 which binds to the polypeptide in a sufficient concentration to modulate the activity of the  
12 polypeptide.

13  
14           22.    A method for identifying a compound which modulates the activity of a  
15 polypeptide of claim 8, comprising:

16           a)    contacting a polypeptide of claim 8 with a test compound; and  
17           b)    determining the effect of the test compound on the activity of the polypeptide  
18 to thereby identify a compound which modulates the activity of the polypeptide.